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October 15, 2019

Hand Delivered

Gwen R. Pinson, Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
Frankfort, Kentucky 40601

RE: Administrative Case No. 2019-00256

Dear Ms. Pinson:

Please find attached the Written Comments of the Solar Energy Industries Association (SEIA) concerning the implementation of the Net Metering Act.

Should you have any questions or concerns regarding the attachment, please contact me at your earliest convenience.

Sincerely,

A handwritten signature in black ink that reads "M. Clark". The signature is written in a cursive, flowing style.

Maggie Clark

Senior Manager, State Affairs  
Solar Energy Industries Association

C/O Matthew Partymiller  
Solar Energy Solutions, LLC

## **I. Introduction**

The Solar Energy Industries Association (“SEIA”) provides these comments in response to the Kentucky Public Service Commission’s July 30<sup>th</sup> Order requesting comments on the implementation of Senate Bill 100, An Act Related to Net Metering (“Net Metering Act”).

SEIA represents the solar industry both at the national and state level. As the national trade association for the U.S. solar energy industry, which employs more than 242,000 Americans, we represent all organizations that promote, manufacture, install and support the development of solar energy. SEIA works with its 1,000 member companies to build jobs, champion the use of cost-competitive solar in America, remove market barriers, and educate the public on the benefits of solar energy. SEIA represents companies that have a direct impact in the Bluegrass State through job creation and investment in local Kentucky communities. We directly represent approximately seven companies that install distributed generation or develop grid-scale solar systems in Kentucky.

## **II. Overview of the 2019 Net Metering Act**

Specifically, the Commission “invites comments from interested utilities and stakeholders in order to develop a record which the Commission can draw upon as it considers broad issues of implementation of the Net Metering Act as they apply to individual utilities.” The Net Metering Act of 2019 specifically tasked the Kentucky Public Service Commission with determining “the dollar value of all electricity generated by an eligible customer-generator that is fed back to the electric grid over a billing period at prices established by the Commission through the ratemaking process (hereafter ‘the compensation rate’).”

Each Kentucky retail electricity supplier has an obligation to offer net metering until the cumulative generating capacity of net metered systems reaches one percent (1%) of a supplier’s

single hour peak load during a calendar year. The Net Metering Act of 2019 dictates that customer-generators shall be compensated by electricity that flows to the retail electric supplier, measured in standard kWh. The act also provides that retail electric suppliers are entitled to rates that recover the cost of serving customer-generators, “including fixed and demand-based costs,” specific to serving eligible customer-generators. Prior to the effective date of the Net Metering Act of 2019, interconnected customer-generators are ‘grandfathered’ into 1:1 net metering rates for a twenty-five (25) year period from when the customer-generator initially began taking net metering service.

### **III. Foundational Principles of Net Metering and Rate Design**

SEIA subscribes to a consensus view on foundational principles that should guide regulators and stakeholders when considering any change to rate design and compensation for distributed solar generation, including potential changes to traditional net energy metering or any alternative programs.<sup>1</sup>

The solar industry believes that customers have a right to reduce their consumption of grid-supplied electricity and that the customers should always receive the full retail price for behind-the-meter choices that reduce energy consumption. We believe that installing an energy efficient appliance that reduces a customer’s consumption of grid-supplied electricity should be treated no differently in rate design than a customer that produces and consumes his own energy with solar and thus uses less grid-supplied electricity.

The solar industry supports retail net metering as a billing mechanism as it is easy for customers to understand and easy for utilities to administer.

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<sup>1</sup> [https://www.seia.org/sites/default/files/NEM%20Future%20Principles\\_Final\\_6-7-17.pdf](https://www.seia.org/sites/default/files/NEM%20Future%20Principles_Final_6-7-17.pdf)

The benefits of distributed solar generation equal or exceed costs to the utility and other customers where penetration is low. Assertions of any “cost shifting” or subsidization must be demonstrated with valid and transparent data. Demonstration of a cost shift must reflect the quantifiable values of distributed solar, the avoided utility costs, savings that result from deploying solar at the distribution level, and the utility cost of providing service.

The solar industry opposes discriminatory fees or rate designs that single out customer-generators. In the same vein, the creation of a separate, customer-generator specific rate class must be based on factual demonstration of significantly different load and cost characteristics, evidenced by publicly available data.

#### **IV. Suggested Criteria and Conditions for the Consideration of Alternatives to Net Metering**

The solar industry understands that the Commission has been told to consider a change or alternative to net metering through enactment of the Net Energy Metering Act of 2019. However, the penetration level of customer-produced generation should be the leading threshold criteria to trigger a consideration of a change or an alternative to net metering. Kentucky currently only has approximately 618 customer-generators in the state, representing 6.7 MW amount of private generation in the state.<sup>2</sup> For context, the state has a net summer capacity of about 20 GW.<sup>3</sup> That means that currently installed amounts of customer-generator solar represent about 0.033% of the net summer capacity.

From a national perspective, the National Association of Regulatory Utility Commissioners (NARUC) developed a manual, “Distributed Energy Resources Rate Design and Compensation” which addresses many of the important issues for consideration before the

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<sup>2</sup> <https://www.eia.gov/electricity/data/eia861m/#netmeter>

<sup>3</sup> <https://www.eia.gov/electricity/state/Kentucky/>

Commission. The manual observes a 5% DER adoption threshold for a successor phase of DER integration and optimization encouraged through rate design.<sup>4</sup>

As previously mentioned, net metering in Kentucky is already limited to 1% cumulative generating capacity of a utility's single-hour peak load during the previous year. While the solar industry opposes arbitrary caps on customer choice, the current 1% cap does represent a preexisting policy inflection point where changes to net metering could naturally be considered. We believe any decision regarding a successor net metering tariff should only become effective after the 1% cap is hit.

The solar industry appreciates the Commission's early engagement to identify issues key to the upcoming net metering proceeding. We would respectfully urge the Commission to require utilities to submit to data collection and analysis toward the development of a factual basis for any changes to rate designs and compensation mechanisms. For example, the solar industry would like to understand the quantified amounts of any extra costs to serve customer-generators. We would like for the utilities to supply this data in a transparent format so that third parties can analyze it and draw independent conclusions.

If the Commission deems it appropriate to change the compensation mechanism or value for customer-generated energy, the solar industry recommends that any change be gradual, predictable, and address customer needs for simplicity.

#### **V. Fixed costs covered by customer-generators through existing rate design**

The \$14/month service charge for Kentucky Power Company<sup>5</sup> customers reflects the variable and fixed cost to service all customers. Customer-generators that net meter should

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<sup>4</sup> <https://pubs.naruc.org/pub/19FDF48B-AA57-5160-DBA1-BE2E9C2F7EA0>, page 60

<sup>5</sup>

[https://www.psc.ky.gov/tariffs/Electric/American%20Electric%20Power%20Company%20\(Kentucky%20Power%20Company\)/Tariff.pdf](https://www.psc.ky.gov/tariffs/Electric/American%20Electric%20Power%20Company%20(Kentucky%20Power%20Company)/Tariff.pdf)

receive the full and accurate value of energy that they generate and self-consume. Customer-generators already pay their fair share of the utilities' cost to service customers through the \$14/month service charge plus any excess grid-supplied energy costs.

- i. Basic service charge for KU: \$0.53/day – average \$15/month<sup>6</sup>
- ii. Basic service charge for LG&E: \$0.45/day – average \$14/month<sup>7</sup>
- iii. Basic service charge for ODP: \$12/month flat rate<sup>8</sup>

## **VI. The Value of Solar Energy**

Many studies exist on different methodologies, inputs, and values of distributed generation.<sup>9</sup> Some of the common categories that reflect potential values or costs of energy produced by customer-generators include: avoided energy, line losses, avoided capacity, ancillary services, transmission and distribution capacity, fuel hedging, utility integration and interconnection costs, and other values related to current or future environmental compliance. In the context of this Kentucky proceeding, full retail rate net metering is an appropriate value for the energy produced by customer-generators. At such low levels of penetration, the value of every incremental customer-generator is still producing benefits to the grid that outweigh any increased costs to serve a customer-generator. In fact, the solar industry maintains that net metering is a net benefit to all customers, not just the customer-generator themselves.

As part of its initial investigation, the Commission should consider whether to commission an independent study on the benefits and costs of net metering in Kentucky and various rate designs for net-metering customers. Numerous states have conducted such studies on net metering to better identify the impacts, both positive and negative, of net metering on

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<sup>6</sup> <https://lge-ku.com/sites/default/files/Example-Residential-KU-Electric-Bill.pdf>

<sup>7</sup> <https://lge-ku.com/sites/default/files/Example-Residential-LGE-Electric-Bill.pdf>

<sup>8</sup> <https://lge-ku.com/sites/default/files/Example-Residential-ODP-Electric-Bill.pdf>

<sup>9</sup> <https://www.seia.org/initiatives/solar-cost-benefit-studies>

customers, utilities, and society more generally before any changes to net metering were adopted.<sup>10</sup> Most studies have found that the value of retail rate net-metered solar exceeds the costs.<sup>11</sup>

## **VII. Potential Impacts of Moving Away from 1:1 Net Metering**

The Nevada solar market is a cautionary example of what can happen to jobs and economic development in a state when drastic policy changes occur. In December 2015, the Nevada Public Utilities Commission changed the net metering tariff by tripling the fixed charge customer-generators paid and reduced the credit of generated energy by 50%.<sup>12</sup> The Nevada PUC did dismiss a proposed demand charge in the same proceeding, but the damage from the increased fixed charge and decreased energy credit was enough to send a signal that Nevada was closed for business. After the Nevada PUC decision took effect in January 2016, Nevada lost 2,600 jobs overnight.<sup>13</sup>

The Nevada state legislature took action to reverse the Nevada PUC's decision, thus reinstating net metering in the state in June 2017.<sup>14</sup> Legislators established a compensation rate tied to a tiered capacity schedule. The four tiers of 80 MW of capacity created a stepped down energy value starting at 95% of the retail rate and decreasing by 7% for each tier of 80 MW installed. With Nevada's high penetration of solar, the solar industry believes this approach is commensurate with ensuring the stability of a market, maintaining fair customer economics, and creating certainty for long term investments.

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<sup>10</sup> <https://www.seia.org/initiatives/solar-cost-benefit-studies>

<sup>11</sup> <https://www.brookings.edu/research/rooftop-solar-net-metering-is-a-net-benefit/#>

<sup>12</sup> <http://pucweb1.state.nv.us/PDF/AxImages/DOCKET%202015%20THRU%20PRESENT/2015-7/8305.pdf>

<sup>13</sup> <https://www.greentechmedia.com/articles/read/Nevada-Regulators-Eliminate-Retail-Rate-Net-Metering-for-New-and-Existing-S#gs.9sk2pj>

<sup>14</sup> <https://www.leg.state.nv.us/App/NELIS/REL/79th2017/Bill/5487/Overview>

## VIII. Items for Consideration

The solar industry would like to lay out several topics for the Commission to investigate fully and critically in the context of any net metering proceeding before making a determination on future rate design:

### 1. Fixed Fees

- a. Fixed fees (or basic customer charges) should not exceed the customer-specific costs associated with an additional customer, such as the service drop, billing, and collection.<sup>15</sup> Customer-generators consume fewer kWh from utility-generated power. With fixed fees that accurately reflect the cost to serve customers, customers are adequately incented to reduce their energy charges, and thus overall costs to the system. Customer-generators are no different: they pay the same basic customer charge as other customers, but use less utility-generated power, thus contributing less to demand-based system costs.
- b. High fixed fees solely targeted at customer-generators are punitive and discriminatory in nature. While masquerading as a solution to recover sufficient costs to serve, increasing fixed fees is the easiest way to eat into the economic savings that a solar system can provide. The solar industry believes that there are better ways to address a concern about costs to serve customer-generators, namely a minimum bill approach. This solution creates a monthly bill floor that all customer-generators must pay, regardless of energy consumption or production. In Kentucky, the solar industry recommends a

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<sup>15</sup> <http://www.raponline.org/wp-content/uploads/2016/05/rap-lazar-gonzalez-smart-rate-design-july2015.pdf>



minimum bill of \$20/month for customer-generators, assuming no demand charges are present.

## 2. Demand Charges

- a. Simply put, demand charges are a punishing, unpredictable fee on a monthly electricity bill that effectively eliminate a customer's ability to predict his/her usage in given month. Demand charges disproportionately affect low income and elderly customers as it eliminates the predictability needed to manage a fixed income or budget. In the context of customer-generators who are, on average, using less electricity from the grid, a brief instance of high usage can skyrocket an electricity bill. This uncertainty undermines a system-wide goal of saving energy and keeping customers' bills low.
- b. Usage patterns of customer-generators vary throughout the month and, provided they are residential customers, individual usage generally does not peak during peak system usage overall. Thus, demand charges traditionally overcharge small customers.<sup>16</sup>

## 3. Accurate Valuation of Distributed Generation

- a. The solar industry strongly encourages the Commission to hire a third party to do an independent study on the benefits and costs of net metering in Kentucky and various rate designs for net-metering customers. Each state has different system characteristics and policy goals, and we believe that the Commission should task an independent third party to evaluate the costs and values of

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<sup>16</sup> [https://votesolar.org/files/6414/6888/3283/Charge-Without-CauseFinal\\_71816.pdf](https://votesolar.org/files/6414/6888/3283/Charge-Without-CauseFinal_71816.pdf)

customer-generated energy. The utilities should provide data to this third party for analysis, under a confidentiality agreement if necessary.

- b. Utilities often posit that customer-generators create a cross-subsidy, whereas they are shifting system costs to other ratepayers by, again, “not paying their fair share” of fixed costs. We would like the Commission to address this issue in detail, using the same independent third party. We would like for the Commission to investigate this subject in the context of how customer-generators provide benefits in areas often not fully appreciated by traditional utility economics, including but not limited to: economic development, job creation, fuel hedging, rate stabilization, and deferred utility investments. There is recent precedent for this approach, as evidenced by the 2019 Energy Freedom Act in South Carolina which directs the South Carolina Public Service Commission to consider the “direct and indirect economic impact of the net energy metering program to the State.”<sup>17</sup>

SEIA respectfully submit these comments for consideration.

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<sup>17</sup> [https://www.scstatehouse.gov/sess123\\_2019-2020/bills/3659.htm](https://www.scstatehouse.gov/sess123_2019-2020/bills/3659.htm)